

What is claimed is:

1. A multipoint minute electrode, comprising:
a plane supporter,
a sharpened probe continuously elongating from an almost center of said supporter, a plurality of measuring points being formed on a forefront of said probe,
and
electrode wirings for said measuring points.
2. The multipoint minute electrode as defined in claim 1, wherein the width of said probe is set to 100 μm or below.
3. The multipoint minute electrode as defined in claim 1, wherein at least said forefront of said probe is structured in multilayered shape, and said electrode wirings are disposed in multistage in layers constituting said multilayered forefront of said probe.
4. The multipoint minute electrode as defined in claim 1, further comprising electrode pads to be electrically connected to said measuring points on a top surface of said supporter.
5. The multipoint minute electrode as defined in claim 1, wherein said measuring points includes Pt.
6. The multipoint minute electrode as defined in claim 3, wherein said electrode wirings includes pt.
7. The multipoint minute electrode as defined in claim 6, wherein said electrode wirings includes a multilayered structure with a Pt layer.
8. A device for measuring a living organism voltage, comprising:
a multipoint minute electrode as defined in claim 1,
and
a connector to support a supporter of said multipoint minute electrode.
9. A method for fabricating a multipoint minute electrode comprising a plane supporter, a sharpened probe continuously elongating from an almost center of said supporter, a plurality of measuring points being formed on a forefront of said probe, and electrode wirings for said measuring points, comprising:
a first step of forming a resist layer on an underlayer formed on a given

substrate, and patterning said resist layer into a designed shape to form a resist pattern,

a second step of anisotropic-etching said underlayer via said resist pattern as a mask by using a first etching solution so as to form side etched portions therein,

a third step of forming electrode layer over said resist pattern on said underlayer,

a fourth step of removing said underlayer and said resist pattern, to form an electrode pattern constituting said electrode wirings for said measuring points of said probe,

a fifth step of forming an insulating layer on said electrode pattern,

a sixth step of partially etching and removing said insulating layer to expose said electrode pattern,

a seventh step of patterning said underlayer and said insulating layer to expose said substrate, and anisotropic etching said substrate by using a second etching solution, to form said probe sharply,

and

an eighth step of forming said measuring points so as to be electrically connected to said electrode pattern.

10. The fabricating method as defined in claim 9, wherein said underlayer includes nickel.

11. The fabricating method as defined in claim 9, wherein said first etching solution is iron chloride solution.

12. The fabricating method as defined in claim 9, wherein said electrode layer includes Pt.

13. The fabricating method as defined in claim 12, wherein said electrode layer includes a multilayered structure with a pt layer.

14. The fabricating method as defined in claim 9, wherein said measuring points includes Pt.

15. The fabricating method as defined in claim 9, wherein said second etching solution is tetramethylammonium hydroxide (TMAH).

16. The fabricating method as defined in claim 9, wherein said first step through said sixth step are defined as one cycle process, and said electrode

pattern is shaped in multistage by repeating said cycle process, to form in multistage said electrode wirings of said probe of said multipoint minute electrode.

17. The fabricating method as defined in claim 9, further comprising an additional step of forming electrode pads on a top surface of said supporter of said multipoint minute electrode.

18. The fabricating method as defined in claim 9, wherein the width of said probe of said multipoint minute electrode is set to 100 μm or below.

19. A method for fabricating a living organism voltage-measuring device, comprising the steps of:

fabricating a multipoint minute electrode by a fabricating method as defined in claim 9,

and

forming a connector so as to support a supporter of said multipoint minute electrode.